

**REMARKS**

Claims 1-5 are pending in this application.

Claims 4 and 5 have been added in order to more particularly point out, and distinctly claim the subject matter to which the Applicants regard as their invention. It is believed that this Amendment is fully responsive to the Office Action dated **July 12, 2002**.

**Objection to the Specification**

The abstract is amended, as needed, to overcome this objection. Reconsideration and withdrawal of this objection are respectfully requested.

**Claim Objections**

The claims are amended, as needed, to overcome this objection. Reconsideration and withdrawal of this objection are respectfully requested.

**Claim Rejection under 35 USC §103(a)**

Claims 1 and 2 are rejected under 35 US §103(a) as being unpatentable over JP2001-10552 in view of Everts (U.S. Patent No. 5,076,149).

Section 2143 of the MPEP has specifically stated that:

“To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claimed limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant’s disclosure. *In re Vaeck*, 947 F.2d 466, 20 USPQ2d 1438 (Fed. Cir. 1991).”

Therefore, it is both a court position and a Patent Office position that to establish a *prima facie* case of obviousness, 1) there **must be** some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; 2) there **must be** a reasonable expectation of success; and 3) the teaching or suggestion to make the claimed combination and the reasonable expectation of success **must both be** found in the prior art, and not based on applicant’s disclosure.

Therefore, should the Office either be unable to identified each and every aspect of the above-mentioned claimed features after taking full consideration of the asserted prior art in a way exactly applied in the outstanding Office action, or the Office recognizes that the rejection simply does not arise to a level objectively fulfilling all three criteria of establishing a *prima facie* case of obviousness, it is respectfully submitted that the obviousness rejection is defective and allowance of the claimed invention is requested.

#### **Allowable Subject Matter**

The indication of allowable subject matter in claim 3 is noted with appreciation. Accordingly, new claims 4 and 5 are drafted each incorporating the subject matter of claim 1 and a part of claim 3. Allowance of these claims is respectfully requested.

**Prior Art Indicated To Be Pertinent To The Disclosure**

The Office has provided a list of prior art indicated to be pertinent to the Applicant's invention. Consistent with the understanding as stipulated in MPEP 706.02 that only the best prior art should be applied, this list of prior art not having been applied by the Office, it is the Applicant's understanding that the Office must have considered the listed prior art to be no more pertinent than the applied prior art of record.

**Conclusion**

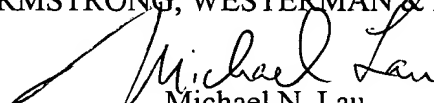
In view of the aforementioned amendments and accompanying remarks, all pending claims are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,  
ARMSTRONG, WESTERMAN & HATTORI, LLP

  
Michael N. Lau

Attorney for Applicant

Reg. No. 39,479

MNL/alw

Atty. Docket No. **010416**  
Suite 1000, 1725 K Street, N.W.  
Washington, D.C. 20006  
(202) 659-2930



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PATENT TRADEMARK OFFICE

U.S. Patent Application Serial No. 09/814,183  
Attorney Docket No.: 010416

Enclosures: Version with markings to show changes made  
Request for Approval of Drawing Corrections  
w/Figs. 12 and 13 marked in red ink  
Substitute Abstract of the Disclosure

**IN THE DRAWINGS:**

\_\_\_\_\_ Please amend Figs. 12 and 13 as shown in the attached Request for Approval of Drawing Corrections.

**IN THE CLAIMS:**

Please amend claims 1-3 as follows:

1. (Amended) A fixing structure for fixing a pin with a link in a caterpillar, comprising:

a fixing structure comprising a link [1], a pin [2] inserted into a pin inserting bore [7] provided on the link [1];

the pin [2] formed with [an] a peripherally extending concave groove [18] on [the] an end portion of the pin [2];

a peripheral rim of an opening of the pin inserting bore [7] and the peripherally extending concave groove [18] together form an annular space [16];

[a] an escape-preventing ring [17] for limiting relative motion of the pin [2] toward [the] an off-opening side is fitted, further [the] a hardness of the pin [2] at [the] a bottom surface of the groove [18] is lowered than that of the pin [2] at [the] a portion with which the link [1] is connected.

2. (Amended) The fixing structure of claim 1 wherein the hardness of the bottom surface of the peripherally extending concave groove [18] is lowered by an annealing process.

3. (Amended) The fixing structure of claim 1 or 2, wherein the hardness of the bottom surface of the peripherally extending concave groove [18] ranges from 30 to 45 as measured by a HRC scale and the hardness of the link engaging portion ranges from 50 to 65 as measured by a HRC scale.

**IN THE ABSTRACT:**

Please amend the Abstract as indicated below:

**ABSTRACT OF THE DISCLOSURE:**

[An] A link of a caterpillar which is allowed to maintain stabilized durability for a long period. The fixing structure has a link 1, and a pin 2 inserted into a pin inserting bore 7 formed in the link 1. A peripherally extending concave groove 18 formed on the end portion of the pin 2 and an opening periphery conjugate to [forms] form an annular space 16. In order to limit relative escaping motion of the pin 2 in the off-opening side (toward receding direction), [a] an escape limiting ring 17 is fitted into the annular space 16. The hardness of the bottom surface of the peripherally extending concave groove 18 is [lowered] lower than the surface hardness of a link engaging portion of the pin 2.